

The 'hidden cause' of back pain...

Sciatica and Piriformis Syndrome

There's a hidden cause of back pain... it's something very few medical or healthcare professionals are even aware of... If they were, they wouldn't be treating conditions. Instead, they'd be identifying and addressing what brought about the condition in the first place.

For example, if you're diagnosed with a herniated disc, instead of just treating the symptoms, they should be finding out what caused the disc to herniate to begin with.

Back pain does not happen overnight

While the pain may appear suddenly, the fact is the problem has been developing for months or

more likely, years. The reason you have back pain is because your body and spine have been pulled out of their normal position and into what we call dysfunctions. If you are like most people, you move around and live your life without ever being aware that you are forcing your body to work with these dysfunctions, and sooner or later your body breaks down.

An example of a dysfunction with an excessive curve in the lower spine. As you can imagine, it doesn't take long before this results in pain. It's very important to understand though, that these dysfunctions don't just appear out of nowhere - we create them!

Physical dysfunctions develop over time and are the direct result of imbalances between various muscle groups, what we call **muscle imbalances**. Did you know that while you may feel pain in your back, the actual cause of the pain could be the front of your thighs? For example, an imbalance between the muscles of the thighs can pull your pelvis and spine out of position and this dysfunction can quickly cause all sorts of problems.

Back pain begins with muscle imbalances that over time create a dysfunction. Your body is then forced to work each day with this dysfunction and eventually this creates a condition, like a herniated disc for example. Then the condition causes pain and as you know, pain is your body's way of alerting you to a problem that needs to be fixed... just as a light on the dashboard of a car alerts the driver to a problem.

Muscle imbalances are the 'hidden cause' of nearly every case of back pain and sciatica...

What is a muscle imbalance you ask? When a muscle or group of muscles overpowers the opposing muscle(s), you have a muscle imbalance. Think of it as a Tug-of-War. When your muscles are out of balance they pull your bones and joints out of their normal position and this places them under constant and uneven stress. For example, the position and curvature of your spine is determined by the amount of balance in numerous muscle groups like the thighs, hips and torso. When muscle imbalances pull your spine and body out of alignment, the level of stress on certain muscles, bones and joints increases.

And even the smallest muscle imbalance can over time pull you out of balance and place tremendous amounts of uneven pressure and wear and tear on your body... especially the vertebrae, discs, spine and its supporting muscles.

Why do you have muscle imbalances?

There are several things that contribute to and create muscle imbalances such as how active you are, what activities you do frequently, if you exercise, the exercises you perform, how you sit, stand and walk, if you work, what you do for work, etc.

Also, it's very important to note that everyone has muscle imbalances and as you may have already realised, muscle imbalances are responsible for more than just back pain and sciatica. Even if you injured your back while lifting something or gardening, we are certain that it isn't the underlying cause. What caused it was the months and years of uneven pressure and wear and tear on your body caused by muscle imbalances. The event simply was your body finally breaking down.

Four conditions cause sciatica...which is causing your pain?

Sciatic pain is simply caused by pressure being placed on the sciatic nerve and there are primarily four things that can create this... you may have one or more of the following conditions:

Condition 1 - Piriformis Syndrome

This is the most common cause of sciatic pain and is created when pressure is placed on the sciatic nerve by the piriformis muscle. Muscle imbalances pull the hip joints and pelvis out of place and this change of position typically shortens and tightens the Piriformis muscle, which then places pressure on the sciatic nerve.

A study done on over 1500 people who were suffering from sciatic pain:

The sciatic nerve runs under the piriformis muscle the majority of the time; however, it occasionally will run through or around the piriformis muscle as shown in the other examples. Whatever the case, muscle imbalances will cause major problems and are the underlying cause of Piriformis Syndrome.

What is a muscle imbalance?

When a muscle overpowers the opposing muscle, you have a muscle imbalance... think Tug-of-War. When your muscles are out of balance they pull your bones and joints out of their normal position and this places your muscles, bones and joints under constant stress and uneven pressure. For example, the position and curvature of your spine is determined by numerous muscles and whether they are balanced or not. **There are over 640 muscles in the human body!** Nearly every muscle in the body affects your spine and if just one of these muscles is out of balance you could be in trouble...

It's critical for you to understand that your body alignment and mechanics are affected by your muscles and even the smallest muscle imbalance can, over time, place tremendous amounts of uneven pressure and wear and tear on your body, especially the spine and its supporting muscles.

Condition 2 - herniated discs

Sciatica can also be caused by pressure on the nerve due to a herniated or bulging disc. A herniation is when a disc protrudes out from between the vertebrae and this can either be caused by an event like a car accident, or by months or years of uneven pressure due to muscle imbalances.

This is the type of damage muscles imbalances can create when they are not addressed! Solutions like ultrasound, medications, cortisone injections, general exercises or chiropractic adjustments can correct muscles imbalances in the short term. Long-term solutions to this problem include electro-acupuncture stimulation with cupping therapy or, in the most difficult cases, key hole surgery to decompress the disc. But surgical strategies bring their own long-term problems of overall spinal imbalance.

A herniated disc is probably the most common diagnosis for sciatica and this diagnosis is often

used when a doctor can't find an explanation for the person's pain... similar to a doctor explaining away various aches and pains as arthritis.

Plus, research has shown that in many cases, people live with herniated discs yet never have any back pain or symptoms. The point is, if you've been diagnosed with a herniated or bulging disc, it may not be what's really causing your back pain! Even if you've had x-rays and MRIs done that show a herniated disc, chances are still very good that it's not the problem...The problem is, even if you were diagnosed with a herniated disc, you have to understand that if you don't address what caused the disc to herniate in the first place, you'll likely struggle with back pain or sciatica for years.

Nearly every herniated disc is the result of muscle imbalances! Whether it be physical, emotional or chemical trauma.

When your muscles pull your spine out of alignment, the uneven pressure and compression on your vertebrae wears down your discs much faster than normal... And it's very important to note that your discs are NOT designed to be subjected to this constant, uneven stress and that's why sooner or later they will begin to bulge or herniate.

Condition 3 - spinal stenosis

Sciatica can also be caused by pressure on the nerve due to a narrowing of the spinal canal. There are several possible conditions that lead to spinal stenosis:

🕒 **Ageing**-With age, the body's ligaments (tough connective tissues between the bones in the spine) can thicken. Spurs (small growths) may develop on the bones and into the spinal canal. The facet joints (flat surfaces on each vertebra that form the spinal column) also may begin to thicken.

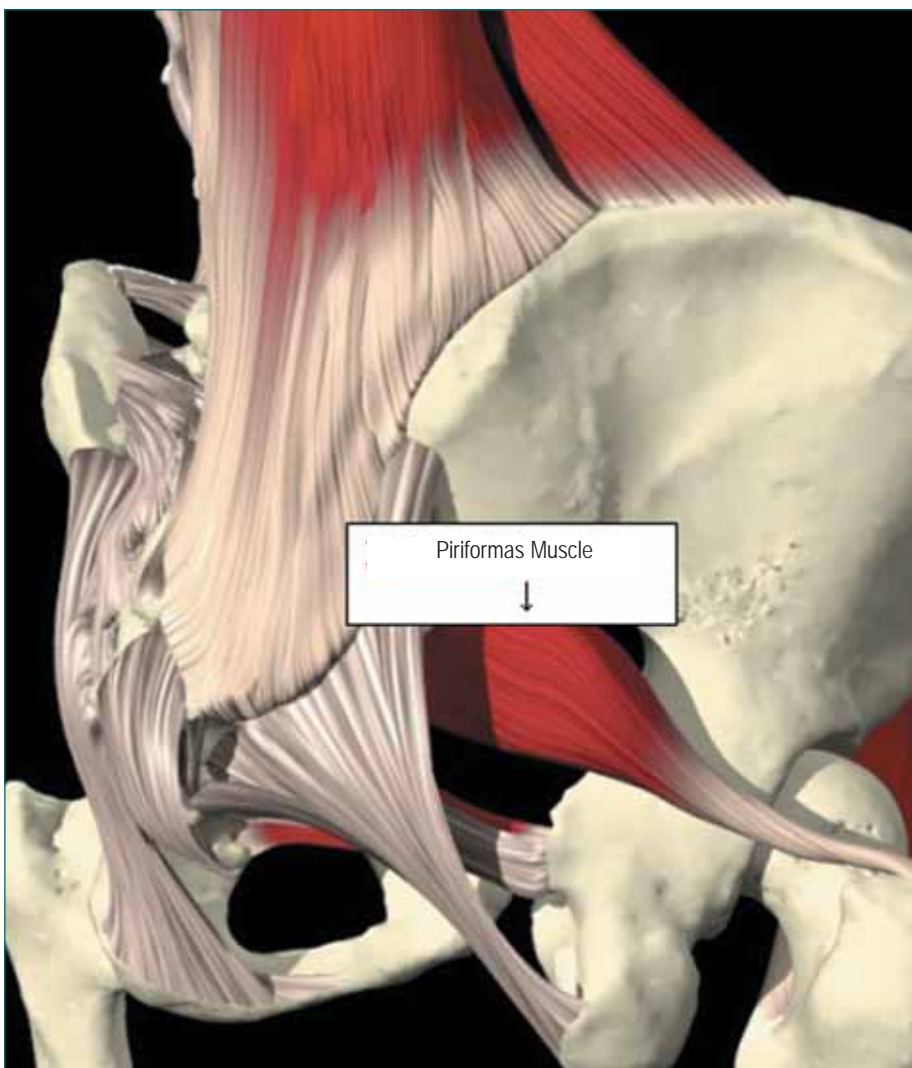
🚗 **Trauma**-Accidents and injuries may either dislocate the spine and the spinal canal or cause burst fractures that produce fragments of bone that penetrate the canal.

👨 **Heredity**-If the spinal canal is too small at birth, symptoms of spinal stenosis may show up in a relatively young person. Structural deformities of the involved vertebrae can cause narrowing of the spinal canal.

🌫 **Fluorosis**-Fluorosis is an excessive level of fluoride in the body. It may result from chronic inhalation of industrial dusts or gases contaminated with fluorides, prolonged ingestion of water containing large amounts of fluorides, or accidental ingestion of fluoride-containing insecticides. The condition may lead to calcified spinal ligaments or softened bones and to degenerative conditions like spinal stenosis.

The most important thing you can do if you are certain you have spinal stenosis is to ensure that you maintain as close to normal curvature in the spine. The more your spine is pulled out of place the tighter the space gets in the spinal canal...

Identifying and addressing muscle imbalances is crucial!





Condition 4 - spondylolisthesis

Sciatica can also be caused by spondylolisthesis, yet is much less common. Spondylolisthesis occurs when one vertebra slips forward and places pressure on the adjacent vertebrae. This condition will produce both a gradual deterioration of the vertebrae in the lower spine and can also cause a narrowing of the spinal canal.

If abnormal motion allows this vertebra to move back and forth nerves in the spinal canal may be affected causing pain, numbness, tingling or weakness in the legs. Many individuals who have this condition may not have symptoms while others may experience long-term back pain and or sciatica.

Spondylolisthesis is most common in the lower spine. The most common cause is degenerative disease (like arthritis) and the slip usually occurs between the fourth and fifth lumbar vertebrae where there is the most curvature in the spine. Muscle imbalances play a major role in two ways:

1. Degenerative diseases like arthritis are much more common in areas of the body where there is uneven pressure and wear and tear.
2. Muscle imbalances increase the amount of curvature in the lower spine making this condition much more likely to come about.

Other causes of spondylolisthesis include stress fractures (which are often caused by repetitive hyper-extension of the back, commonly seen in gymnasts), and traumatic fractures. Spondylolisthesis may also occasionally be associated with bone diseases. As with the other three conditions, muscle imbalances have a lot to do with spondylolisthesis.

The secret to getting lasting relief is...

In order to get long-term relief from back pain you have to start at the beginning, and that's with the muscle imbalances. This means you have to identify the muscle imbalances that you have and then work towards correcting and improving them. While this may sound complicated, the good news is it isn't! Just by reading this article you should now have an understanding of how back pain develops and because of this your recovery will be much easier and faster than most other back pain sufferers.

So how do you do find out which muscle imbalances you have? We at OBB have a systematic muscle testing protocol to assess

which muscle is imbalanced. This will then give you the structural problems and then an accurate solution can be devised from the findings.

Why didn't my doctor tell me any of this?

There are several reasons why you likely haven't heard of or been told about this approach and these concepts before. The first reason is, unfortunately, most healthcare professionals just aren't aware of it. While this approach is based on an understanding of basic human anatomy and biomechanics, it just isn't taught in the various medical schools. It's so unknown to most healthcare professionals that if you asked them about muscle imbalances and testing they may not have a clue about what you are saying and even look at you as if you're an idiot!

And while you may have had an evaluation or assessment performed by your doctor, it's highly unlikely that they looked for muscle imbalances. Another likely reason is the poor set-up and design of the medical systems in most countries. For example, in the UK, patients can be rushed through their appointments as the doctors have to and want to see as many patients as they can in a given day. Or many people are forced to wait months or even years just to get an appointment to be seen by a consultant!

Which of these traditional back pain treatments have failed to give you lasting relief?

- Physical Therapy
- Chiropractic Care
- Orthopaedic Therapy
- Massage Therapy
- Surgery
- Cortisone Shots
- Trigger Point Injections
- Anti-Inflammatory
- Ultrasound
- Electrical stimulation

While some of these treatments may offer some benefit, they almost always fail to deliver lasting relief because they don't address the underlying cause of the problem. If these options really worked so well, you wouldn't be reading this AND your back would be feeling great, right? TT

Dr John Brazier (TCM) teaches his award winning diploma in Oriental Body Balance in London and the North. It includes Eastern and Western assessment, diagnosis and treatment skills covering both the mind and the body. His worldwide success and the success of his students speaks for itself. To find out more about his training courses please call 01253 728035 www.orientalbodybalance.co.uk

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References
Stanley Hoppenfeld
Lars Petersen

A sporting chance to improve your career with The Open University

The Open University is introducing a new range of sports and fitness related courses and qualifications following huge interest from students and to meet demands of the sports and fitness industries.

The two new courses for 2008 are Exploring Sport Online (Y164), a 20-week introductory course and an Introduction to Sport, Fitness and Management (E112), a nine-month course which forms the entry point to the Certificate of Higher Education in Sport, Fitness and Management and the Foundation Degree in Sport, Fitness and Health.

The Foundation Degree aims to provide students with an understanding of the theoretical and practical knowledge relevant to professional practice in leadership and instructional settings in sport and fitness. It will also provide additional expertise in health, the psychology of exercise and working with groups with special exercise needs, such as those with medical conditions. It will be delivered in collaboration with YMCA Fitness Industry Training, one of the UK's leading providers of Exercise and Fitness Instructor training, and will allow students access to the Register of Exercise Professionals (REPs) at Level 3.

It is proposed that the degree will incorporate the fitness industry recognised level 3 related vocational qualification Advanced Fitness Instructing (Gym).

Ben Oakley, senior lecturer in sports studies and course leader at the OU, said: "The growth and development of the sport, health and fitness industry and related courses has been phenomenal over the last 20 years. We believe there is a demand for flexible distance learning to meet the development needs of people currently working in the industry or those simply interested in the subject.

"Our initial research also suggested that employers are looking for new, innovative ways to develop their staff without losing them for long periods of time.

"Some may ask if sport or fitness related courses can be taught by distance learning methods. The answer is: absolutely! There is a great deal of background knowledge that underpins the subject. For example, on the scientific side there is the theory of how the body adapts to exercise, whilst on the management side there is knowledge of how the sector is organised and customer care is implemented. These subjects and many others are well suited to distance learning since ultimately people can study themselves or an organisation they are familiar with." TT

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